

PROCESS FOR OPTIMIZING JUNCTIONS FORMED BY SOLID PHASE
EPITAXY

ABSTRACT

A method of forming a semiconductor device includes forming at least one amorphous region within an at least partially formed semiconductor device. The method also
5 includes implanting a halogen species in the amorphous region of the at least partially formed semiconductor device. The method further includes doping at least a portion of the at least one amorphous region to form at least one junction within the at least partially formed
10 semiconductor device. The method also includes performing solid phase epitaxial re-growth to activate the doped portion of the at least one amorphous region of the at least partially formed semiconductor device.